

What is claimed is:

1. A method of producing a radial tire for a construction vehicle,

in which a first green tire is removed from a first step molding machine after the first green tire is formed by the first step molding machine; a vulcanizer bladder unit is installed to the first green tire thus removed, and the first green tire is inflated by the vulcanizer bladder unit; subsequently the first green tire is once again placed in the first step molding machine while the vulcanizer bladder unit is still being installed to the first green tire; belts and tread rubber are adhered to the outer periphery of the first green tire on the first step molding machine to form the first green tire into a completed green tire; and the completed green tire is assembled into a vulcanizing mold while the vulcanizer bladder unit is still being installed on the completed green tire to be vulcanized.

2. The method of producing a radial tire for a construction vehicle according to claim 1, wherein the process of forming the first green tire in the first step molding machine comprises:

mounting a carcass ply cylindrically onto the outside of a forming drum provided on the first step molding machine;

transferring bead core assemblies respectively to two end portions of the carcass ply in the axis direction, and folding back the two end portions of the carcass ply to wrap the bead core assemblies respectively; and

winding side rubber around an outer periphery of each of the two end portions of the carcass ply thus folded back.

3. The method of producing a radial tire for a construction vehicle according to claim 2,

wherein the process of placing the first green tire to the first step molding machine once again comprises:

removing the forming drum from the first step molding machine, and thereafter placing the first green tire to the first step molding machine instead of the forming drum.

4. The method of producing a radial tire for a construction vehicle according to any one of claims 1 to 3,

wherein a surface of a bladder of the vulcanizer bladder unit is coated with a mold lubricant in advance when the vulcanizer bladder unit is installed into the first green tire which has been removed from the first step molding machine.